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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
CANELLA, KAREN A	
ART UNIT	PAPER NUMBER
1642	

DATE MAILED: 01/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/822,379	LOW ET AL.	
	Examiner	Art Unit	
	Karen A Canella	1642	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1,4, 5, 8-10,13-16,18-38, 41-52* is/are pending in the application.

4a) Of the above claim(s) *4,5,14,15 and 47* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1,8-10,13,16,18-38,41-46 and 48-52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Claims 2, 3, 6, 7, 11, 12, 17, 39 and 40 have been canceled. Claims 1, 8, 9, 10, 13, 19, 23-27, 30, 31, 33-35, 38 and 41-45 have been amended. Claims 48-54 have been added. Claims 4, 5, 14, 15 and 47 remain withdrawn from consideration. Claims 1, 8-10, 13, 16, 18-38, 41-46 and 48-52 are under consideration.

2. The rejection of claims 9, 10 and 13, 17, 19, 30, 31, 33-35 and 43-46 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention is withdrawn in light of applicants amendments.

3. The rejection of claims 43-46 under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a method dependent upon molecules which bind to the folate receptor and the EphA2 receptor, does not reasonably provide enablement for vitamins that binds receptors which are not the folate receptor is maintained for reasons of record. Applicant has not modified claim 43 to recite the limitation of folic acid or folic acid analogs or binding to the EphA2 receptor.

Claims 1, 8-10, 13, 16, 18-38, 41-46 and 48-52 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. .

(A) As drawn to an immunogen which is not an antibody.

Applicant has failed to provide citations from the specification which would support this new limitation.

(B) As drawn to claim 16.

Claim 1 has been amended to qualify the ligand as a folate-receptor binding ligand. Original claim 16 embodies the method of claim 1 wherein the ligand binding site is an antigen

which is preferentially expressed, uniquely expressed or overexpressed on the surface of said population of cancer cells. The specification and the art support the limitation of the overexpression of the folate receptor on cancer cells. however, there is no support in the specification for the limitation that the folate receptor is overexpressed specifically on metastatic cancer cells. The specification and the art teach that the EphA2 receptor is specifically urpregulated in metaststic cells. Given the amendment to claim 1, claim 16 is now drawn to new matter.

(c) As drawn to an Ephrin family member

New claim 52 is drawn to a method reliant upon the genus of ligands which bind to Ephrin family members. The specification provides support only for the EphA2 ligand. New claim 52 thus represents a broadening of the scope of the instant invention and accordingly is rejected for incorporating new matter.

(D) As drawn to claim 53

New claim 53 recites the limitation of covalent bonding through a divalent linker. Applicant has failed to provide citations in the specification which support the introduction of this specific limitation.

4. The rejection of claims 1, 8-10, 13, 16, 18-26, 28-38, 41 and 42 under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, specifically for reliance upon the identity of folic acid analogues, is withdrawn in light of applicants arguments.

5. The rejection of claim 43 under 35 U.S.C. 102(b) as being anticipated by either of Frincke et al (EP 217,577) or Krantz et al (U.S. 5,547,668, reference AB of the I.D.S. submitted December 18, 2001) or Pouletty et al (WO 97/37690) is withdrawn in light of applicants amendment to claim 43 which has clarified the metes and bounds of the claim.

6. The rejection of claim 43 under 35 U.S.C. 102(e) as being anticipated by Cowan (WO 01/32207) in light of applicants amendment to claim 43 which has clarified the metes and bounds of the claim..

7. The rejection of claims 1, 8, 13, 26, 36 and 43 under 35 U.S.C. 102(b) as being anticipated by Roy et al (International Journal of Cancer, 1998, Vol. 76, pp. 761-766, reference AZ of the I.D.S. submitted December 18, 2001) is withdrawn in light of applicants amendments.

8. The rejection of claims 43 and 44 under 35 U.S.C. 103(a) as being unpatentable over Frincke et al (EP 217,577) in view of any of Cady et al (U.S. 5,266,333) or Schrader (U.S. 4,713,249) or Modi (U.S. 5,417,982) is withdrawn in light of applicants amendments which clarified the metes and bounds of claim 43.

9. The rejection of claims 43, 45 and 46 under 35 U.S.C. 103(a) as being unpatentable over Cowan (WO 01/32207) in view of Smith (WO 97/41831) and Insel (Annals of the New York Academy of Science, 1995, Vol. 754, pp. 35-47) is maintained for reasons of record. New claims 50 and 51 are also rejected for the same reason of record. Cowan et al teach a method for of enhancing an endogenous immune response-mediated specific elimination of a population of pathogenic cells in a host animal harboring said population wherein the members of said cell population have an accessible binding site for a ligand, said method comprising the step of administering to said host a composition comprising an immunogen conjugated to a ligand, wherein said immunogen is known to be recognized by an endogenous or an exogenous antibody in the host or is known to be recognized directly by an immune cell in the host. Cowan teaches that immunogens can be selected such that a humoral, cellular or humoral and cellular response to the target antigen is selected (page 9, first paragraph and page 11, under the heading "Example 4") an that DNP can stimulate humoral immunity to DNP. Cowan et al teach that the target antigen can be on a cancer cell (page 8, line 3). Cowan et al teach the administration of an immunogen, or a hapten-immunogen conjugate for a sufficient amount of time in order to confer on the patient humoral immunity to the hapten and cellular immunity to the immunogen (page 8, first full paragraph), thus teaching the specific embodiments of claims 43, 45, 46, 50 and 51 with

the exception of the administration of a compound capable of stimulating an endogenous immune response. Cowan et al teach the proliferation of activated immune cells having binding sites for the immunogen (page 8, first full paragraph). Cowan does not teach the administering to said host a compound capable of stimulating an endogenous immune response wherein the compound does not bind to the ligand-immunogen conjugate.

Smith teaches the stimulation of the immune response in human by the administration of Il-2, Il-12, Il-15, INF-alpha and INF-gamma (page 10). Smith et al suggest the use of these cytokines along with folic acid analogues (page 26, lines 31-32).

Insel teach that Il-2 and INF-gamma and TNF-beta activates macrophage to mediate the delayed hypersensitivity and that Il-4, Il-5, Il-6 and Il-10 provide help to B-cells for antibody production.

It would have been prima facie obvious to one of ordinary skill in the art at the time the claimed invention was made to administer cytokines to activate macrophages for the Th1 response and administer cytokines to provide B-cell help. One of ordinary skill in the art would have been motivated to do so with a reasonable expectation of success by the teachings of Cowan on the desirability of eliciting both humoral and cell-mediated immunity and the teachings of Insel on the specific cytokines associated with cell mediated immunity (Th1) and humoral immunity (Th2), and the teachings of Smith et al on the stimulation of the human immune system by the administration of cytokines.

10. The rejection of claims 1, 8, 13, 18-26, 28-35, 38 and 43 under 35 U.S.C. 103(a) as being unpatentable over Pouletty (WO 97/37690) in view of Smith (WO 97/41831) and Insel (Annals of the New York Academy of Science, 1995, Vol. 754, pp. 35-47) and the abstract of Mazzoni et al (Proc Annu Meet Am Assoc cancer Res, 1997, Vol. 38, page A558) is maintained for reasons of record. Amended claim 45 and dependent claim 46, as well as newly added claims 48-51 and 54 are also rejected for the same reasons of record.

Pouletty et al teach a method a method for of enhancing an endogenous immune response-mediated specific elimination of a population of pathogenic cells in a host animal harboring said population wherein the members of said cell population have an accessible binding site for a ligand, said method comprising the step of administering to said host a

composition comprising an immunogen conjugated to a ligand, wherein said immunogen is known to be recognized by an endogenous or an exogenous antibody in the host or is known to be recognized directly by an immune cell in the host. Pouletty et al teach alpha-galactosyl as an immunogen, wherein the host has natural antibodies or to which the host has been previously sensitized (page 6, lines 10-32 and page 7, lines 13-19) either through natural exposure or previous vaccination. Pouletty et al folate as a ligand which is capable of binding to high affinity receptors on many tumor cells (page 5, lines 3-9). Pouletty et al teach immunogens as including antigens to which the host has been previously sensitized due to a prior immune response , such as diphtheria, tetanus, influenza, polio, rubella or measles (page 6, lines 16-22). Pouletty et al teach that the anti-immunogen antibodies may interact with members of the complement cascade or induce ADCC to kill the target cell, or the immunogen may bind to a T-cell that provides a cytotoxic function (page 6, lines 30-32). Pouletty et al teach folate as a binding moiety for tumor cells (page 5, lines 3-9), the immunogen of fluorescein (page 15, paragraphs 2 and 3) and the administration of exogenous anti-FITC antibodies (page 18, lines 28-30). Thus, Pouletty teach all the embodiments of the claims 1, 8, 13, 18-26, 28-35, 38, 43, 45, 46, 48-51 and 54 with the exception of the administration of the compound capable of stimulating an endogenous immune response.

Smith teaches the stimulation of the immune response in human by the administration of Il-2, Il-12, Il-15, INF-alpha and INF-gamma (page 10). Smith et al suggest the use of these cytokines along with folic acid analogues (page 26, lines 31-32).

Insel teach that Il-2 and INF-gamma and TNF-beta activates macrophage to mediate the delayed hypersensitivity and that Il-4, Il-5, Il-6 and Il-10 provide help to B-cells for antibody production.

The abstract of Mazzoni et al (Proc Annu Meet Am Assoc cancer Res, 1997, Vol. 38, page A558) teaches that Il-2 is important to support the growth of effector cells in immunotherapy of cancer.

It would have been prima facie obvious to one of ordinary skill in the art at the time the claimed invention was made to administer cytokines to activate macrophages for the Th1 response and administer cytokines to for the Th2 response to provide B-cell help. One of ordinary skill in the art would have been motivated to do so with a reasonable expectation of

success by the teachings of the abstract of Mazzoni et al on the importance of Il-2 in maintaining effector cells during immunotherapy of cancer, the teachings of Insel on the importance of specific cytokines on the proliferation of T and B cells and the teachings of Smith et al on the administration of cytokines to humans as adjutants

11. Claims 1, 8-10, 13, 18-26, 28-35, 38, 41-43, 45, 46, 48-51 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pouletty (WO 97/37690) and Smith (WO 97/41831) and Insel (Annals of the New York Academy of Science, 1995, Vol. 754, pp. 35-47) and the abstract of Mazzoni et al (Proc Annu Meet Am Assoc cancer Res, 1997, Vol. 38, page A558) as applied to claims 1, 8, 13, 18-26, 28-35, 38, 43, 45, 46, 48-51 and 54, above, in further view of the abstract of Leamon et al (Journal of Drug Targeting, 1999, Vol. 7, pp. 157-169) .

The combination of Pouletty et al and Smith and Insel and the abstract of Mazzoni et al render obvious the specific embodiments of the claim 1, 8, 13, 18-26, 28-35, 38 and 43, 45 46, 48-51 and 54 for the reason set forth above. Neither of the references specifically addresses the limitation of claims 9, 10, 41 and 42, wherein the linkage is only through the gamma carboxyl group of the glutamyl moiety, or the alpha carboxyl group of the glutamyl moiety, respectively.

The abstract of Leamon et al teaches that folic acid coupled to peptides by linkages ether at the alpha or gamma carboxyls of the glutamyl moiety can bind to the folic acid receptor at identical levels with non-conjugated folic acid.

It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to conjugate the folic acid to the immunogen through either the alpha or gamma glutamyl groups. One of skill in the art would have been motivated to conjugate folic acid t an immunogen by the teachings of Pouletty et al, one of skill in the art would know by the teachings of the abstract of Leamon et al that either the alpha or gamma glutamyl carboxyl group would be appropriate for effecting the conjugation.

12. Claims 1, 8, 13, 18-35, 38, 43, 45, 46, 48-51 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pouletty (WO 97/37690) in view of Smith (WO 97/41831) and Insel (Annals of the New York Academy of Science, 1995, Vol. 754, pp. 35-47) and the abstract of Mazzoni et al (Proc Annu Meet Am Assoc cancer Res, 1997, Vol. 38, page A558) as applied to

claims 1, 8, 13, 18-26, 28-35, 38, 43, 45, 46, 48-51 and 54 above and further in view of any of Cady et al (U.S. 5,266,333) or Schroder (U.S. 4,713,249) or Modi (U.S. 5,417,982) above

The specific embodiments of claims 1-3, 6-9, 11, 13, 16-26, 28-35, 38, 39, 41-47 are set forth above. Claim 27 embodies the method of claim 1 wherein the ligand-immunogen conjugate composition is administered in multiple injections. Pouletty et al do not teach the pharmaceutical composition in parenteral prolonged release dosage form or the administration of multiple injections of the ligand immunogen composition. Cady et al (U.S. 5,266,333) or Schroder (U.S. 4,713,249) or Modi teach parenteral prolonged release dosage forms. Modi et al also teach that many drugs are susceptible to degradation at the site of injection and consequently require multiple injections in order to achieve the desired efficacy. Modi et al further teach that the controlled release formulation of the drug can provide a delivery system that is more cost efficient than previous delivery systems (column 1, lines 12-21).

It would have been prima facie obvious to one of ordinary skill in the art at the time the claimed invention was made to put the pharmaceutical composition rendered obvious by Pouletty and Smith and Insel and the abstract of Mazzoni et al into a prolonged release form or to administer the aforesaid composition in multiple injections. One of ordinary skill in the art would have been motivated to do by the teachings of Modi et al on the need to administer multiple injections or prolonged release form of a drug in order to achieve desirable therapeutic benefit.

13. Claims 43, 45, 46 and 50-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cowan (WO 01/32207) in view of Smith (WO 97/41831) and Insel (Annals of the New York Academy of Science, 1995, Vol. 754, pp. 35-47) as applied to claims 43, 45,46, 50 and 51 above, and further in view of the abstracts of Easty et al (International journal of Cancer, 1999, Vol. 84, pp 494-501) and Walker-Daniels et al (Prostate, 1999, vol. 41, pp. 275-280). The combination of Cowan and Insel and Smith renders obvious the embodiments of claims 1-3, 8, 18, 19, 21-26, 29, 32, 33, 35-37, 43 and 45-47 for the reason set forth above.

Claim 52 is drawn to a method of enhancing an endogenous immune response-mediated elimination of a population of cancer cells in a host animal harboring said population, said method comprising the steps of administering to said host a compositions comprising an

immunogen conjugated to a ligand that binds to an extracellular epitope of a member of the Ephrin family of proteins wherein said immunogen is not an antibody and wherein the immunogen is recognized by an endogenous or an exogenous antibody in the host or is recognized directly by an immune cell in the host; and administering to said host a compound capable of stimulating an endogenous immune response wherein the compound does not bid to the ligand-immungen conjugate.

Cowan teaches ligand binding sites on cancer cells (page 7, bridging paragraph). Cowan does not teach antigens which are binding sites wherein said binding sites are overexpressed or uniquely expressed on cancer cells, nor does Cowan teach the ligand binding site of an Ephrin family member.

The abstracts of Easty and Walker-Daniels both teach that the EphA2 antigen is upregulated on metastatic melanomas and on metastatic prostate cells. EphA2 is a member of the Ephrin family.

It would have been prima facie obvious to one of ordinary skill in the art at the time the claimed invention was made to use the specific EphA2 antigen for the tumor antigen in the method rendered obvious by the combination of Cowan and Insel and Smith. One of ordinary skill in the art would have been motivated to do so with a reasonable expectation of success by the teachings of the abstracts of Easty et al and Walker-Daniels on the differential expression of the EphA2 antigen on metastatic melanoma and prostate cells versus cell in the primary tumor. One of skill in the art would be motivated to target the ligand immunogen conjugate to metastatic cells in order to stop the spread of cancer in a patient.

14. Claims 1, 8, 13, 18-26, 28-35, 38, 43, 45, 46, 48-52 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pouletty (WO 97/37690) in view of Smith (WO 97/41831) and Insel (Annals of the New York Academy of Science, 1995, Vol. 754, pp. 35-47) and the abstract of Mazzoni et al (Proc Annu Meet Am Assoc cancer Res, 1997, Vol. 38, page A558) as applied to claims 1, 8, 13, 18-26, 28-35, 38, 43, 45, 46, 48-51 and 54 above and further in view of the abstracts of Easty et al (International journal of Cancer, 1999, Vol. 84, pp 494-501) and Walker-Daniels et al (Prostate, 1999, vol. 41, pp. 275-280). The specific embodiments of the claims are set forth above. The combination of Pouletty and Smith and Insel and the abstracts of

Mazzoni and Easty and Walker-Daniels renders obvious the instant claims for the reason set forth above. Pouletty et al do not teach the EphA2 antigen as a ligand binding site.

The abstracts of Easty and Walker-Daniels teach the up regulation of the EphA2 antigen on metastatic melanomas and metastatic prostate cells.

It would have been prima facie obvious to one of ordinary skill in the art at the time the claimed invention was made to use the specific EphA2 antigen for the tumor antigen in the method rendered obvious by the combination of Pouletty et al and Smith and Insel and the abstract of Mazzoni.

One of ordinary skill in the art would have been motivated to do so with a reasonable expectation of success by the teachings of the abstracts of Easty et al and Walker-Daniels on the differential expression of the EphA2 antigen on metastatic melanoma and prostate cells versus cell in the primary tumor. One of skill in the art would be motivated to target the ligand immunogen conjugate to metastatic cells in order to stop the spread of cancer in a patient.

15. Applicant has amended claims 1, 38 and 43 to recite the specific limitation of "wherein the immunogen is not an antibody"; however, this limitation does not exclude the teachings of Pouletty et al which rely on immunogens which are haptens such as DNP and therefore not antibodies, nor the teachings of Cowan et al who teaches haptens as immunogens, rather than antibodies. Applicant argues extensively that there is no motivation to combine the teachings of Pouletty et al or Cowan et al which describe the claimed ligand-immunogen conjugate with a compound capable of stimulating an immune response and does not bind to the ligand immunogen conjugate. This has been considered but not found persuasive. As of the filing date sought, it is well recognized in the art that the administration of a compound capable of stimulating an immune response in addition to a molecule or complex to which immunity is desired is within the realm of administering an adjuvant with a specific vaccine. One of skill in the would understand that said adjuvant is capable of producing a stronger immune response against the administered molecule or complex. The interleukins and interferons are well known to act boost the immune response against vaccine compositions, as taught by Insel et al and Smith. Due to the state of the art, one of skill in the art would be motivated to combine cytokines such as interleukins and interferons with vaccine compositions.

Applicant also argues that it could not be anticipated that the combination of interleukins or interferons with the ligand immunogen conjugate would induce a synergistic effect. This has been considered but not found persuasive. The claims contain no specific embodiments regarding any synergistic effect, and it appears that a boosting of the immune response in the presence of administered interleukins or interferons would not be an unexpected result, as all effective adjutants cause a boosting of the immune response.

16. All other rejections and objections as set forth in the previous Office action are withdrawn.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen Canella whose telephone number is (703) 308-8362. The examiner can normally be reached on Monday through Friday from 8:30 am to 6:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Caputa, can be reached on (703) 308-3995. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Karen A. Canella, Ph.D.
Patent Examiner, Art Unit 1642
12/29/03